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REMARKS

Applicants' attorney would like to thank the Examiner for careful consideration of this Application. Claims 1-20 are pending in the application. Claims 13-19 have been withdrawn.

Rejection under 35 U.S.C. § 102

Claims 1, 2 and 6-12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,337,391 to Clayton. Applicants traverse this ground of rejection.

It is well settled that in order for a prior art reference to anticipate a Claim, the reference must disclose each and every element of the Claim with sufficient clarity to prove its existence in prior art. Clayton discloses bonding siliceous materials to organic polymers with organic titanates. The titanium compounds described in Clayton are not equivalent to the mineral filler with at least one organic compound containing at least one basic nitrogen-containing group and at least one hydroxyl group as claimed in the present invention. First, the organic titanates disclosed in Clayton are not solid, in the alternative they are a molecular species which is soluble in a solvent. Accordingly the organic titanates disclosed are not mineral fillers as claimed in the present invention.

Second, Clayton describes a variety of 'non-volatile organic solvent-soluble organic derivatives of titanium that are useful as bonding agents.' See Column 1, lines 22-28. These structures have a variety of organic groups which are attached either directly or indirectly to the titanium metal center. The 'R' group can be replaced by a variety of functional groups, and X can be a reactive group which can react with the siliceous surface, such as a halogen, hydroxyl or ester group. Of particular relevance is the mention of triethanolamine titanate-N-oleate. In contrast thereto, in the present invention, the amino-alcohol is not bound to a metal center prior to mixing with the filler. In fact, it is the presence of the filler which serves as a carrier for the amino-alcohol. Accordingly Clayton does not teach or suggest the use of, for example, an aminoalcohols as a modifier for butyl based formations with a filler support.

Third, according to the teachings of Clayton, the organic titanium compound is as bonding agent, and as such is used to "bond" a siliceous solid (such as a glass fiber, glass flakes, etc.) to an organic polymer. See Column 1, lines 14-18; Column 1, lines

19-23); and Column 1 line 71 to Column 2 lines 18. Clayton does not teach or suggest mixing a "pre-reacted" filler with a halobutyl elastomer. Thus, Clayton fails to disclose each and every element of the pending claims, and fails to anticipate the current claimed invention. Accordingly, reconsideration and withdrawal of the Examiner's rejection is respectfully requested.

Rejection under 35 U.S.C. § 102

Claims 1-12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 7,015,265 to Resendes et al. Applicants traverse this ground of rejection.

It is well settled that in order for a prior art reference to anticipate a Claim, the reference must disclose each and every element of the Claim with sufficient clarity to prove its existence in prior art. Applicants submit Resendes et al. fails to anticipate the present invention.

Resendes et al. discloses a process for preparing filled halobutyl elastomers, which includes mixing a halobutyl elastomer, particles of filler, an additive containing both amino alcohol functional groups, and one or more hydrated metal halogens. According to Resendes et al. the organic compound which has at least one hydroxyl group and at least one basic nitrogen containing group may react with the mineral filler. This "reaction" disclosed at Column 5, lines 15-29 is an "in-situ" reaction. Example 2 of Resendes et al. also clearly teaches mixing all the components "in-situ."

Applicants submit that Resendes et al. fails to teach or suggest a process utilizing "pre-reacted" filler as claimed in the present invention. And as noted in Example 2 of the present invention, the use of DMAE functionalized silica significantly decreases the DIN abrasion volume loss of this compound compared to the control compound which was prepared in an analogous manner, but with the use of unmodified HiSil 233. The compound prepared with DMAE functionalized silica was found to possess a t03 time only slightly lower than that found for the control compound. This t03 time is, however, significantly longer than that observed for compounds in which DMAE is added to a mixture of BB2030 and HiSil 233 via conventional mixing approaches. RPA Analysis (Figure 3) of the compound prepared with DMAE

functionalized silica revealed a significant improvement in filler distribution as evidenced by the lower value of G^* at low strains as compared to the control compound based on unmodified HISil 233. The stress-strain profile (Figure 4) revealed a substantial improvement in the degree of re-inforcement when compared to that observed for the control compound.

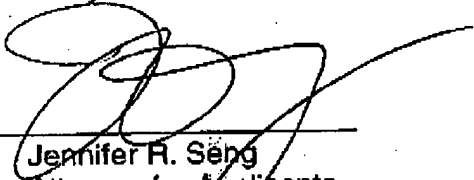
Thus, Resendes et al. fails to disclose each and every element of the pending claims, and fails to anticipate the current claimed invention. Accordingly, reconsideration and withdrawal of the Examiner's rejection is respectfully requested.

Applicants submit that the pending claims are in condition for allowance and notice to such effect is respectfully requested. Should the Examiner have any questions regarding this application, the Examiner is invited to initiate a telephone conference with the undersigned.

The USPTO is hereby authorized to charge any fees, including any fees for an extension of time or those under 37 C.F.R. 1.16 or 1.17, which may be required by this paper, and/or to credit any overpayments to Deposit Account No. 50-2527.

Respectfully submitted,

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